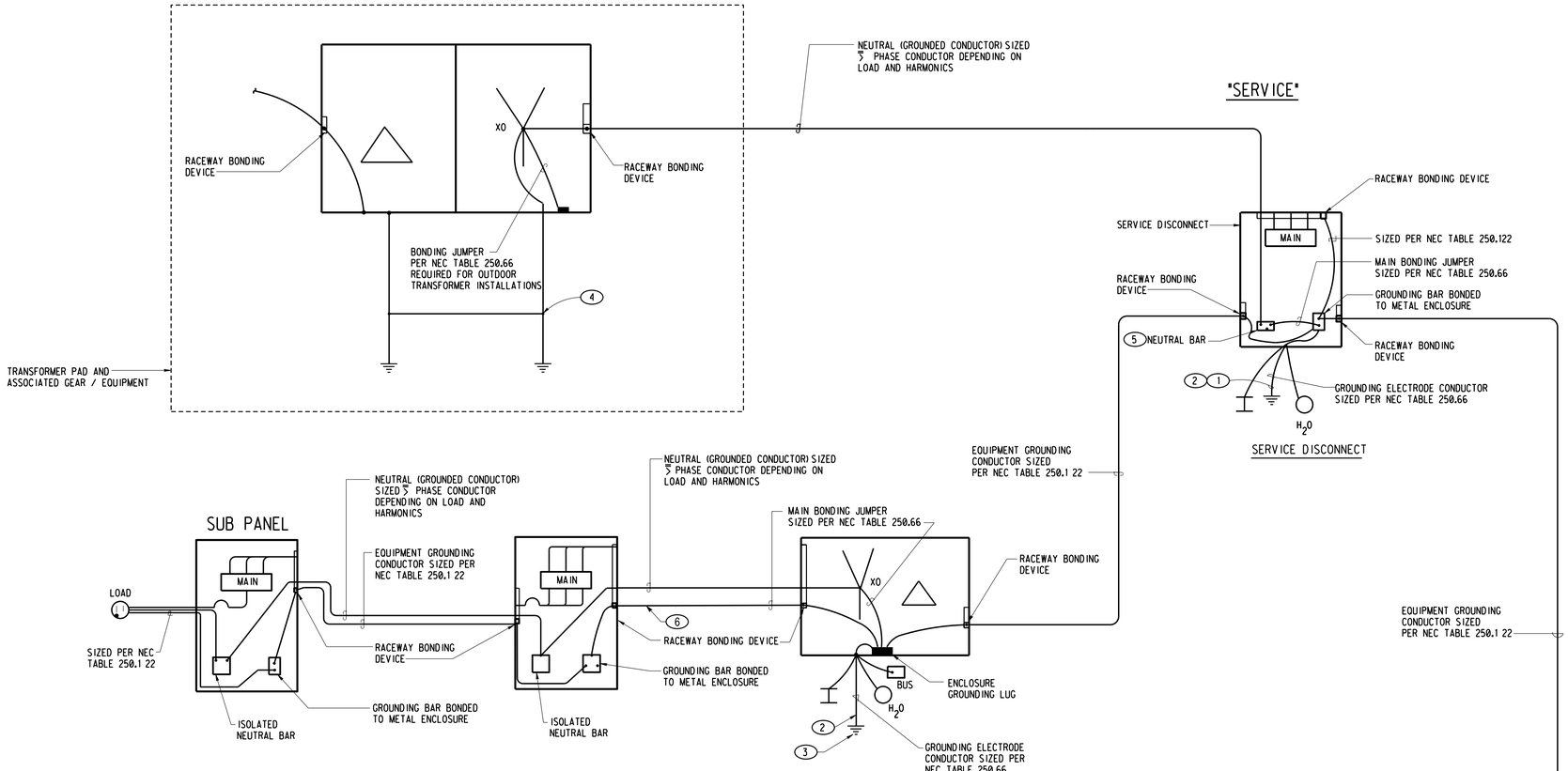
NOT TO BE USED AS A STANDARD DRAWING

DEVELOP SITE SPECIFIC DRAWINGS USING THESE GUIDELINES



STANDARD GROUNDING ONE-LINE DIAGRAM FOR SEPARATELY DERIVED SERVICES

SCALE: NTS

GENERAL NOTES

1. OTHER SYSTEMS TO BE BONDED TO GROUNDING ELECTRODE SYSTEM.
   A. LIGHTNING PROTECTION.
   B. INTERIOR METALLIC GAS PIPE.
   C. ANTENNAS.
   D. TELEPHONE.
   E. INTERIOR METAL WATER PIPE.
   F. OTHER INTERIOR METAL PIPE SYSTEM.
2. ALL EQUIPMENT GROUNDING AND GROUNDED CONDUCTOR SIZES SHALL BE SHOWN ON ELECTRICAL DRAWINGS.
3. DRAWINGS REFLECT MOST RECENT EDITION OF NATIONAL ELECTRIC CODE.
4. REFER TO STANDARD DRAWING ES7003STD FOR OUTDOOR SERVICE GROUNDING REQUIREMENTS.

KEYED NOTES

1. BUILDING GROUNDING ELECTRODE SYSTEM SHALL INCLUDE ALL AVAILABLE POINTS.
   A) UNDERGROUND METAL WATER PIPE (WITHIN 5' OF ENTRANCE & PRIOR TO ANY VALVE)
   B) BUILDING STEEL
   C) OTHER METAL PIPING
   D) MADE ELECTRODE
2. GROUNDING ELECTRODE CONDUCTOR INSTALLED WITHOUT CONDUIT (USE CONDUIT FOR PHYSICAL PROTECTION WHEN APPROPRIATE) NEC 250-64(B).
3. GROUNDING ELECTRODE SHALL BE ROUTED TO THE CLOSEST AVAILABLE ELECTRODE. (IN ORDER OF PREFERENCE)
   a. BUILDING STEEL.
   b. WATER PIPE.
   c. MADE ELECTRODE BONDED AT SERVICE.
4. SEE WP4001STD FOR TRANSFORMER GROUNDING DETAILS.
5. NEUTRAL BUS BAR BONDED TO ENCLOSURE OR MAIN BONDING JUMPER. INSTALLED PER NEC 250.24 (A).
6. SEE NEC 250.30 (A)(2)

REV	DATE	DESCRIPTION	DWN	CKD	APP
E	03/12	ADDED GEN NOTE 4	NR	EB	EB
D	11/11	GENERAL REVISIONS	NR	EB	
C	9/09	REVISED BONDING JUMPER	MN	HOE	
B	6/01	UDS MODS	EG	FL	

P.O.
PROJECT NO.

U.S. DEPARTMENT OF ENERGY

NNSA/SANDIA SITE OFFICE — ALBUQUERQUE, NEW MEXICO

SANDIA NATIONAL LABORATORIES

Standard Grounding One-Line Diagram

Standards

P.O.
PROJECT NO.
DRAWN BY
CHECKED BY
SNL ENGR
DATE 11/09/2011

DISCP: E SUB-DISCP: S STD

OLD FILENAME: 083639E.21
FILENAME: ES7001STD.DGN

SIZE D+ DRAWING NO ES7001STD.DGN SEQ.

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